

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION

the specification of which (check one)

☐ is attached hereto.

☒ was filed on October 9, 1997 as United States Application Number or PCT International Application Serial No. 08/948,124 and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known by me to be material to patentability as defined in 37 C.F.R. §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>			Priority Not Claimed
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[   ]
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[   ]
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	[   ]

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>08/802,474</u> (Application Serial No.)	<u>2/18/97</u> (Filing date)	<u>Pending</u> (Status: patented, pending, abandoned)
<u>                    </u> (Application Serial No.)	<u>                    </u> (Filing date)	<u>                    </u> (Status: patented, pending, abandoned)
<u>                    </u> (Application Serial No.)	<u>                    </u> (Filing date)	<u>                    </u> (Status: patented, pending, abandoned)
<u>                    </u> (Application Serial No.)	<u>                    </u> (Filing date)	<u>                    </u> (Status: patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states:

David E. Brook	Reg. No. 22,592	Alice O. Carroll	Reg. No. 33,542
James M. Smith	Reg. No. 28,043	N. Scott Pierce	Reg. No. 34,900
Leo R. Reynolds	Reg. No. 20,884	Richard A. Wise	Reg. No. 18,041
Patricia Granahan	Reg. No. 32,227	Helen E. Wendler	Reg. No. 37,964
Mary Lou Wakimura	Reg. No. 31,804	Carolyn S. Elmore	Reg. No. 37,567
Thomas O. Hoover	Reg. No. 32,470	Lisa M. Warren	Reg. No. 41,368

all of Hamilton, Brook, Smith and Reynolds, P.C., Two Militia Drive,  
Lexington, Massachusetts 02173;

and \_\_\_\_\_

Send correspondence to: Carolyn S. Elmore  
Hamilton, Brook, Smith & Reynolds, P.C.  
Two Militia Drive, Lexington, MA 02173-4799

Direct telephone calls to: Carolyn S. Elmore

(781) 861-6240

Direct facsimiles to: Carolyn S. Elmore

(781) 861-9540

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

-----  
Full name of sole

or first inventor Ellis Reinherz

Inventor's

Signature *Ellis Reinherz*

Date 1/28/98

Residence 113 South Great Road

Lincoln, Massachusetts 01773

Citizenship USA

Post Office Address Same as above  
-----

-----  
Full name of second joint

inventor, if any Linda Clayton

Inventor's

Signature *Linda K. Clayton*

Date 2/6/98

Residence 48 Cedarwood Road

Jamaica Plain, Massachusetts 02130

Citizenship USA

Post Office Address Same as above  
-----

-----  
Full name of third joint

inventor, if any Timothy D. Ocain

Inventor's

Signature \_\_\_\_\_

Date \_\_\_\_\_

Residence 45 Indian Head Road

Framingham, Massachusetts 01701

Citizenship USA

Post Office Address Same as above  
-----

-----  
Full name of fourth joint

inventor, if any Raymond J. Patch

Inventor's

Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 16 Emily Road

Framingham, Massachusetts 01701

Citizenship USA

Post Office Address Same as above

K:\LWARREN\LMW\SUPPORT\WIP\DFCI522A.DEC

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

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My residence, post office address and citizenship are as stated next to my name;

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THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION

the specification of which (check one)

☐ is attached hereto.

☒ was filed on October 9, 1997 as United States Application Number or PCT International Application Serial No. 08/948,124 and was amended on \_\_\_\_\_ (if applicable).

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\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

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(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
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Leo R. Reynolds	Reg. No. 20,884	Richard A. Wise	Reg. No. 18,041
Patricia Granahan	Reg. No. 32,227	Helen E. Wendler	Reg. No. 37,964
Mary Lou Wakimura	Reg. No. 31,804	Carolyn S. Elmore	Reg. No. 37,567
Thomas O. Hoover	Reg. No. 32,470	Lisa M. Warren	Reg. No. 41,368

all of Hamilton, Brook, Smith and Reynolds, P.C., Two Militia Drive, Lexington, Massachusetts 02173;

and \_\_\_\_\_

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Direct: Carolyn S. Elmore

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Full name of sole

or first inventor Ellis Reinherz

Inventor's

Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 113 South Great Road

Lincoln, Massachusetts 01773

Citizenship USA

Post Office Address Same as above

-----  
Full name of second joint

inventor, if any Linda Clayton

Inventor's

Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 48 Cedarwood Road

Jamaica Plain, Massachusetts 02130

Citizenship USA

Post Office Address Same as above

-----  
Full name of third joint

inventor, if any Timothy D. Ocain

Inventor's

Signature Timothy D. Ocain Date 1-20-98

Residence 45 Indian Head Road

Framingham, Massachusetts 01701

Citizenship USA

Post Office Address Same as above

-----  
Full name of fourth joint

inventor, if any Raymond J. Patch

Inventor's

Signature

Raymond J. Patch

Date 1/20/98

Residence

16 Emily Road

Framingham, Massachusetts 01701

Citizenship

USA

Post Office Address

Same as above  
-----

K:\LWARREN\LMW\SUPPORT\WIP\DFCIS22A.DEC



ASSIGNMENT

Whereas, by virtue of an Assignment recorded in the United States Patent and Trademark Office on Reel 9184, Frames 0238-0241, Procept, Inc., of 840 Memorial Drive, Cambridge, Massachusetts 02139, is an owner of United States Patent Application entitled "Thymocyte Caspase Activity and Negative Selection", by Ellis Reinherz, Linda Clayton, Timothy D. Ocain and Raymond J. Patch, U.S. Serial No. 08/948,124, filed October 9, 1997; and


Whereas, by virtue of an Assignment recorded in the United States Patent and Trademark Office on Reel 9184, Frames 0131-0134, Dana-Farber Cancer Institute of 44 Binney Street, Boston, Massachusetts 02115, is also an owner of United States Patent Application entitled "Thymocyte Caspase Activity and Negative Selection", by Ellis Reinherz, Linda Clayton, Timothy D. Ocain and Raymond J. Patch, U.S. Serial No. 08/948,124, filed October 9, 1997; and

Whereas, Dana-Farber Cancer Institute, a Massachusetts Corporation, of 44 Binney Street, Boston, Massachusetts 02115, is desirous of acquiring from Procept, Inc. Procept's entire right, title and interest in, to and under the aforesaid Patent Application and the invention therein described and claimed.

Now, therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, Procept, Inc. (Assignor) hereby sells, transfers and conveys its entire right, title and interest in, to and under said Patent Application and the invention therein described and claimed to Dana-Farber Cancer Institute (Assignee) to the full end of the term for which Letters Patent may be granted and hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent when granted to Dana-Farber Cancer Institute as the sole assignee of the entire right, title and interest in, to and under the same.

Assignor further agrees that Assignor will, without demanding any further consideration therefor, at the request but at the expense of Assignee, do all lawful and just acts, including the execution and acknowledgement of instruments, that may be or become necessary for obtaining, sustaining, or reissuing said Letters Patent as may be granted from said Patent Application, and for maintaining and perfecting Assignee's right to said Letters Patent.

PROCEPT, INC.

By   
Date 12-9-98

State ~~Commonwealth~~ of MASSACHUSETTS

County of MIDDLESEX

Then personally appeared before me the above-named John F. Dee  
and acknowledged that he is an officer of said corporation, that he executed the foregoing  
instrument on behalf of such corporation with authority to do so, and that signing of the  
instrument is the free act and deed of the corporation.

Dated this 9<sup>th</sup> day of DECEMBER, 1998.

Michael S. Morse Notary Public

(SEAL)

MICHAEL S. MORSE (print name)

My Commission expires 8/2/02

D:\DFCI\522A\Procept.Asg

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(d))-NONPROFIT OR ORGANIZATION

DEPT NUMBER: DFCI-522A

Applicant or Patentee: Ellis Reinherz, Linda Clavton, Timothy D. Ocain and Raymond J. Patch  
Serial or Patent No.: 08/948,124  
Filed or Issued: October 9, 1997  
Title: THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF NONPROFIT ORGANIZATION Dana-Farber Cancer Institute  
ADDRESS OF NONPROFIT ORGANIZATION 44 Binney Street  
Boston, Massachusetts 02115

TYPE OF NONPROFIT ORGANIZATION:

- ☐ UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION  
☒ TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3))  
☐ NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)  
☐ WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3)) IF  
LOCATED IN THE UNITED STATES OF AMERICA  
☐ WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED  
STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

I hereby declare the rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention. If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights in the invention must file separate verified statements averring to their status as small entities and that no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.  
☒ each such person, concern or organization is listed below.

Procept, Inc.  
840 Memorial Drive  
Cambridge, Massachusetts 02139

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Julia D. Hart

TITLE IN ORGANIZATION OF PERSON SIGNING Patent Counsel

ADDRESS OF PERSON SIGNING Dana-Farber Cancer Institute, 44 Binney Street, Boston, Massachusetts 02115

SIGNATURE

DATE

Oct 20, 1997

**VERIFIED STATEMENT CLAIMING SMALL BUSINESS STATUS**

(37 CFR 1.9(d) & 1.27(c))-SMALL BUSINESS CONCERN

DOCKET NO.

R: DFCI-522A

Applicant or Patentes: Ellis Reinherz, Linda Clayton, Timothy D. Oscan and Raymond J. Patch

Serial or Patent No.: 08/948,124

Filed or Issued: October 9, 1997

Title: THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION

I hereby declare that I am

- ☐ the owner of the small business concern identified below;  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Prcept, Inc.

ADDRESS OF SMALL BUSINESS CONCERN 840 Memorial Drive

Cambridge, Massachusetts 02139

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12 and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention must file separate verified statements averring to their status as small entities, and no rights in the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.  
☒ each such person, concern or organization is listed below.

Dana-Farber Cancer Institute  
 44 Binney Street  
 Boston, Massachusetts 02115

Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING John F. Dee

TITLE OF PERSON IF OTHER THAN OWNER President and Chief Executive Officer

ADDRESS OF PERSON SIGNING Prcept, Inc. 840 Memorial Drive, Cambridge, MA 02139

SIGNATURE [Signature] DATE 5-10-98

D/DFCI/522A/Prcept.Ver



JointASSIGNMENT

WHEREAS, we, Timothy D. Ocain and Raymond J. Patch (hereinafter "the Assignors"), have, together with co-inventors Ellis Reinherz and Linda Clayton, invented a certain new and useful improvement in THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION described in an application for Letters Patent of the United States, Serial No. 08/948,124, filed October 9, 1997.

WHEREAS, Procept, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 840 Memorial Drive, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the

execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: Timothy D. Ocain  
Timothy D. Ocain

State/Commonwealth  
of MASSACHUSETTS  
County of MIDDLESEX

Then personally appeared before me the above-named Timothy D. Ocain and acknowledged that he executed the foregoing instrument as his free act and deed this 20<sup>th</sup> day of JANUARY, 1998.

(SEAL)

Michael S. Morse Notary Public  
MICHAEL S. MORSE (print name)  
My Commission expires 8 / 02 / 2002

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002

Inventor: Raymond J. Patch  
Raymond J. Patch

~~State~~/Commonwealth  
of MASSACHUSETTS  
County of MIDDLESEX

Then personally appeared before me the above-named Raymond J. Patch and acknowledged that he executed the foregoing instrument as his free act and deed this 20<sup>th</sup> day of JANUARY, 1998.

(SEAL)

Michael S. Morse Notary Public  
MICHAEL S. MORSE (print name)  
My Commission expires 8 / 02 / 2002

K:\LWARREN\LMW\522ASG2

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002



Tab settings  

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

- a) Ellis Reinherz  
b) Linda Clayton

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

### 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: a) January 29, 1998  
b) February 6, 1998

2. Name and address of receiving party(ies)

Name: Dana-Farber Cancer Institute

Internal Address:

Street Address: 44 Binney Street

City: Boston State: MA ZIP: 02115

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

08/948,124

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Carolyn S. Elmore

Internal Address: HAMILTON, BROOK, SMITH  
& REYNOLDS, P.C.

Street Address: Two Militia Drive

City: Lexington State: MA ZIP: 02173

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

- ☒ Enclosed
- ☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Lisa M. Treannie

Name of Person Signing

Reg. No. 41,368

Lisa M. Treannie

Signature

Total number of pages including cover sheet, attachments, and document:

May 11, 1998

Date \_\_\_\_\_

2

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

JointASSIGNMENT

WHEREAS, we, Ellis Reinherz and Linda Clayton (hereinafter "the Assignors"), have, together with co-inventors Timothy D. Ocain and Raymond J. Patch, invented a certain new and useful improvement in THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION described in an application for Letters Patent of the United States, Serial No. 08/948,124, filed October 9, 1997.

WHEREAS, Dana-Farber Cancer Institute (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 44 Binney Street, Boston, Massachusetts 02115 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the

execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: *Ellis Reinherz*  
Ellis Reinherz

State/Commonwealth

of MASSACHUSETTS

County of SUFFOLK

Then personally appeared before me the above-named Ellis Reinherz and acknowledged that he executed the foregoing instrument as his free act and deed this 29<sup>th</sup> day of January, 1998.

(SEAL)

*Donna M. Prestero* Notary Public  
DONNA M. PRESTERONE (print name)  
My Commission expires 8 / 16 / 02

Inventor: Linda K. Clayton  
Linda Clayton

State/Commonwealth

of MASSACHUSETTS

County of SUFFOLK

Then personally appeared before me the above-named Linda Clayton and acknowledged that she executed the foregoing instrument as her free act and deed this 6<sup>th</sup> day of February, 1998.

(SEAL)

Donna M. Prestero Notary Public  
DONNA M. PRESTERONE (print name)  
My Commission expires 8 / 16 / 02



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MARCH 31, 1999

PTAS

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
ALICE O CARROLL, ESQ.  
TWO MILITIA DRIVE  
LEXINGTON, MA 02421-4799



\*100928902A\*

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/18/1998

REEL/FRAME: 9650/0261  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
PROCEPT, INC.

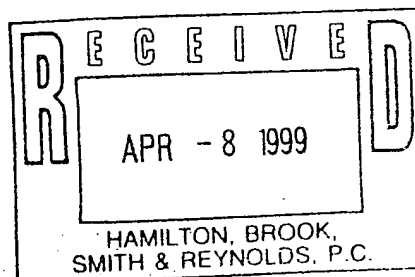
DOC DATE: 12/09/1998

ASSIGNEE:  
DANA-FARBER CANCER INSTITUTE  
44 BINNEY STREET  
CAMBRIDGE, MASSACHUSETTS 02115

SERIAL NUMBER: 08948124  
PATENT NUMBER:

FILING DATE: 10/09/1997  
ISSUE DATE:

MARY BENTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



12-23-1998

Docket No.: DFCI-522A

R



ER SHEET

100928902

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies)

Procept, Inc.  
850 Memorial Drive  
Cambridge, MA 02139

COPY/RECEIVED

MRP  
12-18-98Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: December 9, 1998

## 2. Name and address of receiving party(ies)

Name: Dana-Farber Cancer Institute

Internal Address:

Street Address: 44 Binney Street

City: Cambridge State: MA ZIP: 02115

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)  
08/948,124

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Alice O. Carroll, Esq.

Internal Address:

Hamilton, Brook, Smith &amp; Reynolds, P.C.

Street Address: Two Militia Drive

City: Lexington State: MA ZIP: 02421-4799

## 6. Total number of applications and patents involved: [ 1 ]

## 7. Total Fee (37 C.F.R. 3.41)..... \$ 40.00

- ☒ Enclosed  
☒ Authorized to charge any deficiencies or credit any overpayment to deposit account  
☐ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0380

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Lisa M. Treannie, Reg. #41,368

Name of Person Signing

Lisa M. Treannie

Signature

December 15, 1998

Date

Total number of pages including cover sheet, attachments, and document: [ 3 ]

ASSIGNMENT

Whereas, by virtue of an Assignment recorded in the United States Patent and Trademark Office on Reel 9184, Frames 0238-0241, Procept, Inc., of 840 Memorial Drive, Cambridge, Massachusetts 02139, is an owner of United States Patent Application entitled "Thymocyte Caspase Activity and Negative Selection", by Ellis Reinherz, Linda Clayton, Timothy D. Ocain and Raymond J. Patch, U.S. Serial No. 08/948,124, filed October 9, 1997; and


Whereas, by virtue of an Assignment recorded in the United States Patent and Trademark Office on Reel 9184, Frames 0131-0134, Dana-Farber Cancer Institute of 44 Binney Street, Boston, Massachusetts 02115, is also an owner of United States Patent Application entitled "Thymocyte Caspase Activity and Negative Selection", by Ellis Reinherz, Linda Clayton, Timothy D. Ocain and Raymond J. Patch, U.S. Serial No. 08/948,124, filed October 9, 1997; and

Whereas, Dana-Farber Cancer Institute, a Massachusetts Corporation, of 44 Binney Street, Boston, Massachusetts 02115, is desirous of acquiring from Procept, Inc. Procept's entire right, title and interest in, to and under the aforesaid Patent Application and the invention therein described and claimed.

Now, therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, Procept, Inc. (Assignor) hereby sells, transfers and conveys its entire right, title and interest in, to and under said Patent Application and the invention therein described and claimed to Dana-Farber Cancer Institute (Assignee) to the full end of the term for which Letters Patent may be granted and hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent when granted to Dana-Farber Cancer Institute as the sole assignee of the entire right, title and interest in, to and under the same.

Assignor further agrees that Assignor will, without demanding any further consideration therefor, at the request but at the expense of Assignee, do all lawful and just acts, including the execution and acknowledgement of instruments, that may be or become necessary for obtaining, sustaining, or reissuing said Letters Patent as may be granted from said Patent Application, and for maintaining and perfecting Assignee's right to said Letters Patent.

PROCEPT, INC.

By 

Date 12-9-98

State ~~of~~ Commonwealth of MASSACHUSETTS

County of MIDDLESEX

Then personally appeared before me the above-named John F. Dee  
and acknowledged that he is an officer of said corporation, that he executed the foregoing  
instrument on behalf of such corporation with authority to do so, and that signing of the  
instrument is the free act and deed of the corporation.

Dated this 9<sup>th</sup> day of December, 1998.

Michael S. Morse Notary Public

(SEAL)

MICHAEL S. MORSE (print name)

My Commission expires 8/2/02

D:\DFCI\522A\Procept.Asg

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002





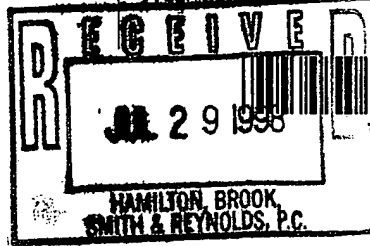
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JULY 23, 1998

PTAS

HAMILTON, BROOK, SMITH, ET AL.  
CAROLYN S. ELMORE  
TWO MILITIA DRIVE  
LEXINGTON, MA 02173



\*100721316A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
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AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER  
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE  
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PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD  
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY  
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.  
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,  
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,  
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/14/1998

REEL/FRAME: 9184/0238  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
OCAIN, TIMOTHY D.

DOC DATE: 01/20/1998

ASSIGNOR:  
PATCH, RAYMOND J.

DOC DATE: 01/20/1998

ASSIGNEE:  
PROCEPT, INC.  
840 MEMORIAL DRIVE  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 08948124  
PATENT NUMBER:

FILING DATE: 10/09/1997  
ISSUE DATE:

JEEVON JONES, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



Joint

ASSIGNMENT

WHEREAS, we, Timothy D. Ocain and Raymond J. Patch (hereinafter "the Assignors"), have, together with co-inventors Ellis Reinherz and Linda Clayton, invented a certain new and useful improvement in THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION described in an application for Letters Patent of the United States, Serial No. 08/948,124, filed October 9, 1997.

WHEREAS, Procept, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 840 Memorial Drive, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the

execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: Timothy D. Ocain  
Timothy D. Ocain

State/Commonwealth  
of MASSACHUSETTS  
County of MIDDLESEX

Then personally appeared before me the above-named Timothy D. Ocain and acknowledged that he executed the foregoing instrument as his free act and deed this 20<sup>th</sup> day of JANUARY, 1998.

(SEAL)

Michael S. Morse Notary Public  
MICHAEL S. MORSE (print name)  
My Commission expires 8 / 02 / 2002

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002

Inventor: Raymond J. Patch  
Raymond J. Patch

~~State~~/Commonwealth  
of MASSACHUSETTS  
County of MIDDLESEX

Then personally appeared before me the above-named Raymond J. Patch and acknowledged that he executed the foregoing instrument as his free act and deed this 20<sup>th</sup> day of JANUARY, 1998.

(SEAL)

Michael S. Morse Notary Public  
MICHAEL S. MORSE (print name)  
My Commission expires 8 / 02 / 2002

K:\LWARREN\LMW\522ASG2

Michael S. Morse  
NOTARY PUBLIC  
My Commission expires Aug. 2, 2002

05-28-1998

OMB No. 0651-0011 (exp. 4/94)

Tab settings: ☐ ☐ ☐ ☒



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1/EP SHEET  
Y

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

DFCI-522A

To the Honorable Commission

of the attached original documents or copy thereof.

1. Name of conveying party(ies):

- a) Ellis Reinherz  
b) Linda Clayton

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: a) January 29, 1998  
b) February 6, 1998

2. Name and address of receiving party(ies)

Name: Dana-Farber Cancer Institute

Internal Address: MAY 14 1998

Street Address: 44 Binney Street

City: Boston State: MA ZIP: 02115

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

08/948,124

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Carolyn S. Elmore

Internal Address: HAMILTON, BROOK, SMITH

& REYNOLDS, P.C.

Street Address: Two Militia Drive

City: Lexington State: MA ZIP: 02173

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41).....\$40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Lisa M. Treannie

Name of Person Signing

Reg. No. 41,368

Lisa M. Treannie

Signature

May 11, 1998

Date

Total number of pages including cover sheet, attachments, and document: 4



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JULY 23, 1998

PTAS  
HAMILTON, BROOK, SMITH & REYNOLDS. P.C.  
CAROLYN S. ELMORE  
TWO MILITIA DRIVE  
LEXINGTON, MA 02173



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RECORDATION DATE: 05/14/1998

REEL/FRAME: 9184/0131  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
REINHERZ, ELLIS

DOC DATE: 01/29/1998

ASSIGNOR:  
CLAYTON, LINDA

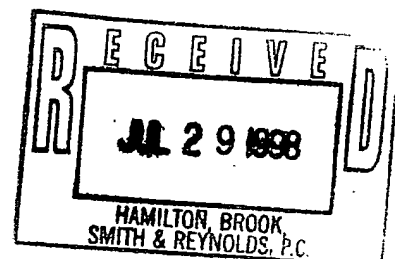
DOC DATE: 02/06/1998

ASSIGNEE:  
DANA-FARBER CANCER INSTITUTE  
44 BINNEY STREET  
BOSTON, MASSACHUSETTS 02115

SERIAL NUMBER: 08948124  
PATENT NUMBER:

FILING DATE: 10/09/1997  
ISSUE DATE:

LAWAN FLETCHER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



Joint

ASSIGNMENT

WHEREAS, we, Ellis Reinherz and Linda Clayton (hereinafter "the Assignors"), have, together with co-inventors Timothy D. Ocain and Raymond J. Patch, invented a certain new and useful improvement in THYMOCYTE CASPASE ACTIVITY AND NEGATIVE SELECTION described in an application for Letters Patent of the United States, Serial No. 08/948,124, filed October 9, 1997.

WHEREAS, Dana-Farber Cancer Institute (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 44 Binney Street, Boston, Massachusetts 02115 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the



execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: *Ellis Reinherz*  
Ellis Reinherz

State/Commonwealth  
of MASSACHUSETTS  
County of SUFFOLK

Then personally appeared before me the above-named Ellis Reinherz and acknowledged that he executed the foregoing instrument as his free act and deed this 29<sup>th</sup> day of January, 1998.

(SEAL)

*Donna M. Presternone* Notary Public  
DONNA M. PRESTERONE (print name)  
My Commission expires 8 / 16 / 02

Inventor:

Linda Clayton

State/Commonwealth

of MASSACHUSETTS

County of SUFFOLK

Then personally appeared before me the above-named Linda Clayton and acknowledged that she executed the foregoing instrument as her free act and deed this 6th day of February, 1998.

(SEAL)

Donna M. Prestero Notary Public

DONNA M. PRESTERONE (print name)

My Commission expires 8 / 16 / 02